

## ABSTRACT

A preferred embodiment of the inventive fluid delivery system comprises a vertical liquid/vapor separator and riser assembly that comprises a multi-phase separator inlet, a vapor outlet and riser, and a liquid 5 outlet port connected to a hydraulically-driven centrifugal pump. By controlling the operational speed of the pump, the level of the separated liquid within the separator can be controlled without the need for control valves. The vertical separator is capable of low pressure 10 operation and large variations in controlled liquid levels within the separator, allowing the relatively slow reaction time pump to control the liquid level from low pressure wells penetrating low pressure reservoirs.